



SEQUENCE LISTING

<110> Fischer, Robert L.
Mizukami, Yukiko
The Regents of the University of California

<120> Methods for Altering Organ Mass, Controlling Fertility
and Enhancing Asexual Reproduction in Plants

<130> 023070-090720US

<140> US 09/479,855

<141> 2000-01-07

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Glu Ala His Leu Trp Asp Asn Ser Phe Lys Lys Glu Gly His Ser Arg	
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aaa gga aga caa gtt tat ctg ggg ggt tat gat atg gag gag aaa gct	960
Lys Gly Arg Gln Val Tyr Leu Gly Gly Tyr Asp Met Glu Glu Lys Ala	
305 310 315 320	
gct cga gca tat gat ctt gct gca ctc aag tac tgg ggt ccc tct act	1008
Ala Arg Ala Tyr Asp Leu Ala Ala Leu Lys Tyr Trp Gly Pro Ser Thr	
325 330 335	
cac act aat ttc tct gtg gag aat tat cag aaa gag att gat gac atg	1056
His Thr Asn Phe Ser Val Glu Asn Tyr Gln Lys Glu Ile Asp Asp Met	
340 345 350	
aag aac atg act cga caa gaa tat gtt gct cac ttg aga aga aaa acc	1104
Lys Asn Met Thr Arg Gln Glu Tyr Val Ala His Leu Arg Arg Lys Thr	
355 360 365	
agt ggt ttc tct agg ggt gct tcc atc tat aga gga gtc acc aga cat	1152
Ser Gly Phe Ser Arg Gly Ala Ser Ile Tyr Arg Gly Val Thr Arg His	
370 375 380	
cac cag cat gga agg tgg caa gct cgg atc ggt aga gtc gct gga aac	1200
His Gln His Gly Arg Trp Gln Ala Arg Ile Gly Arg Val Ala Gly Asn	
385 390 395 400	
aaa gat ctc tac ctt gga act ttc gga act caa gaa gaa gcg gcg gaa	1248
Lys Asp Leu Tyr Leu Gly Thr Phe Gly Thr Gln Glu Glu Ala Ala Glu	
405 410 415	
gcc tat gat gta gca gct atc aag ttc cgt ggc aca aac gcg gtg act	1296
Ala Tyr Asp Val Ala Ala Ile Lys Phe Arg Gly Thr Asn Ala Val Thr	
420 425 430	
aac ttt gac ata aca agg tac gat gtt gat cgc ata atg gct agt aac	1344
Asn Phe Asp Ile Thr Arg Tyr Asp Val Asp Arg Ile Met Ala Ser Asn	
435 440 445	
act ctc ttg tct gga gag atg gct cga agg aac agc aac agc atc gtg	1392
Thr Leu Leu Ser Gly Glu Met Ala Arg Arg Asn Ser Asn Ser Ile Val	
450 455 460	

gtc cgc aac att agc gac gag gaa gcc gct tta acc gct gtc gtg aac 1440
 Val Arg Asn Ile Ser Asp Glu Glu Ala Ala Leu Thr Ala Val Val Asn
 465 470 475 480
 ggt ggt tcc aat aag gaa gtg ggt agc ccg gag agg gtt ttg agt ttt 1488
 Gly Gly Ser Asn Lys Glu Val Gly Ser Pro Glu Arg Val Leu Ser Phe
 485 490 495
 ccg acg ata ttt gcg ttg cct caa gtt ggt ccg aag atg ttc gga gca 1536
 Pro Thr Ile Phe Ala Leu Pro Gln Val Gly Pro Lys Met Phe Gly Ala
 500 505 510
 aat gtg gtc gga aat atg agt tct tgg act acg aac cct aat gct gat 1584
 Asn Val Val Gly Asn Met Ser Ser Trp Thr Thr Asn Pro Asn Ala Asp
 515 520 525
 ctc aag acc gtt tct ctt act ctg ccg cag atg ccg gtt ttc gct gcg 1632
 Leu Lys Thr Val Ser Leu Thr Leu Pro Gln Met Pro Val Phe Ala Ala
 530 535 540
 tgg gct gat tct taa ttcaatctaa tggctaactc tggttttcctt ggtttagggg 1687
 Trp Ala Asp Ser
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 ccaagtgttt aagtttatct ccgggtttat ccggtttgaa ctacaattcg g 1738

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 <212> PRT
 <213> Brassica napus
 <223> canola AINTEGUMENTA (ANT)

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 Gly Phe Ser Leu Ser Ser Asn Met Leu Lys Met Gly Gly Gly Glu Ala
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 Leu Tyr Ser Ser Ser Ser Ser Val Ala Thr Ser Ser Val Pro Pro
 35 40 45
 Gln Leu Val Val Gly Asp Asn Ser Ser Asn Tyr Gly Val Cys Tyr Gly
 50 55 60
 Ser Asn Leu Ala Ala Arg Glu Met Tyr Ser Gln Met Ser Val Met Pro
 65 70 75 80
 Leu Arg Ser Asp Gly Ser Leu Cys Leu Met Glu Ala Leu Asn Arg Ser
 85 90 95
 Ser His Ser Asn Asn His His His Ser Gln Val Ser Ser Pro Lys Met
 100 105 110
 Glu Asp Phe Phe Gly Thr His His His Asn Thr Ser His Lys Glu Ala
 115 120 125
 Met Asp Leu Ser Leu Asp Ser Leu Phe Tyr Asn Thr Thr His Ala Pro
 130 135 140
 Asn Asn Asn Thr Asn Phe Gln Glu Phe Phe Ser Phe Pro Gln Thr Arg
 145 150 155 160
 Asn His His Glu Glu Thr Arg Asn Tyr Glu Asn Asp Pro Gly Leu
 165 170 175
 Thr His Gly Gly Ser Phe Asn Val Gly Val Tyr Gly Glu Phe Gln
 180 185 190
 Gln Ser Leu Ser Leu Ser Met Ser Pro Gly Ser Gln Ser Ser Cys Ile
 195 200 205

Thr	Ala	Ser	His	His	His	Gln	Asn	Gln	Thr	Gln	Asn	His	Gln	Gln	Ile
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Ser	Glu	Ala	Leu	Val	Glu	Thr	Ser	Ala	Gly	Phe	Glu	Thr	Thr	Thr	Met
225					230					235					240
Ala	Ala	Ala	Ala	Ala	Lys	Lys	Lys	Arg	Gly	Gln	Glu	Val	Val	Val	Gly
				245					250						255
Gln	Lys	Gln	Ile	Val	His	Arg	Lys	Ser	Ile	Asp	Thr	Phe	Gly	Gln	Arg
			260					265					270		
Thr	Ser	Gln	Tyr	Arg	Gly	Val	Thr	Arg	His	Arg	Trp	Thr	Gly	Arg	Tyr
		275					280						285		
Glu	Ala	His	Leu	Trp	Asp	Asn	Ser	Phe	Lys	Lys	Glu	Gly	His	Ser	Arg
	290					295					300				
Lys	Gly	Arg	Gln	Val	Tyr	Leu	Gly	Gly	Tyr	Asp	Met	Glu	Glu	Lys	Ala
305					310					315					320
Ala	Arg	Ala	Tyr	Asp	Leu	Ala	Ala	Leu	Lys	Tyr	Trp	Gly	Pro	Ser	Thr
				325					330					335	
His	Thr	Asn	Phe	Ser	Val	Glu	Asn	Tyr	Gln	Lys	Glu	Ile	Asp	Asp	Met
			340					345					350		
Lys	Asn	Met	Thr	Arg	Gln	Glu	Tyr	Val	Ala	His	Leu	Arg	Arg	Lys	Thr
		355					360					365			
Ser	Gly	Phe	Ser	Arg	Gly	Ala	Ser	Ile	Tyr	Arg	Gly	Val	Thr	Arg	His
	370					375					380				
His	Gln	His	Gly	Arg	Trp	Gln	Ala	Arg	Ile	Gly	Arg	Val	Ala	Gly	Asn
385					390					395					400
Lys	Asp	Leu	Tyr	Leu	Gly	Thr	Phe	Gly	Thr	Gln	Glu	Glu	Ala	Ala	Glu
				405					410					415	
Ala	Tyr	Asp	Val	Ala	Ala	Ile	Lys	Phe	Arg	Gly	Thr	Asn	Ala	Val	Thr
			420					425					430		
Asn	Phe	Asp	Ile	Thr	Arg	Tyr	Asp	Val	Asp	Arg	Ile	Met	Ala	Ser	Asn
		435					440					445			
Thr	Leu	Leu	Ser	Gly	Glu	Met	Ala	Arg	Arg	Asn	Ser	Asn	Ser	Ile	Val
	450					455					460				
Val	Arg	Asn	Ile	Ser	Asp	Glu	Glu	Ala	Ala	Leu	Thr	Ala	Val	Val	Asn
465					470					475					480
Gly	Gly	Ser	Asn	Lys	Glu	Val	Gly	Ser	Pro	Glu	Arg	Val	Leu	Ser	Phe
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Pro	Thr	Ile	Phe	Ala	Leu	Pro	Gln	Val	Gly	Pro	Lys	Met	Phe	Gly	Ala
			500					505					510		
Asn	Val	Val	Gly	Asn	Met	Ser	Ser	Trp	Thr	Thr	Asn	Pro	Asn	Ala	Asp
		515					520					525			
Leu	Lys	Thr	Val	Ser	Leu	Thr	Leu	Pro	Gln	Met	Pro	Val	Phe	Ala	Ala
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polynucleotide sequence-1

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33

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 <212> DNA
 <213> Artificial Sequence

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 <212> DNA
 <213> Artificial Sequence

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 polynucleotide sequence-3

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